hold in which hazardous material in bulk is loaded.

(d) Combustible cargo must not be stowed in a hold in which a solid hazardous material in bulk is loaded.

§148.03-13 Completion of off-loading.

Upon the completion of off-loading of a solid hazardous material in bulk, each hold must be thoroughly cleaned of all residue of such material.

Subpart 148.04—Special Additional Requirements for Certain Material

§148.04-1 Radioactive material, Low Specific Activity (LSA).

- (a) Authorized materials are limited to:
- Uranium or thorium ores and physical or chemical concentrates of such ores;
- (2) Uranium metal, natural thorium metal and alloys of these metals; and
- (3) Material of low radioactive concentration, if the estimated radioactivity concentration dose not exceed 0.001 millicurie per gram and the contribution from Group I material (See title 49 CFR parts 170 to 189, inclusive) does not exceed 1 percent of the total radioactivity.
- (b) Each hold used for the transportation of any of these materials must be surveyed with appropriate radiation-detection instruments after the completion of off-loading. Such holds must not again be used for the transportation of any cargo until the radiation dose rate at any accessible surface is less than 0.5 millirem per hour and until there is no significant removable radioactive surface contamination according to 49 CFR 173.443.
- (c) Each hold or barge used for transportation of any of these materials must be effectively closed or covered to prevent dispersal of the material during transportation.

§148.04-9 Fishmeal or scrap, ground or pelletized; fishmeal or scrap, ground and pelletized (mixture).

(a) The fishmeal or scrap, ground or pelletized and fishmeal or scrap, ground and pelletized mixture must contain at least 6 percent moisture by

weight but not more than 12 percent moisture by weight.

- (b) The material must not contain more than 18 percent fat by weight.
- (c) At the time of production of the material, it must be treated with at least 400 ppm antioxidant (ethoxyquin); in the case where the material contains more than 12 percent fat by weight, it must be treated with at least 1000 ppm antioxidant (ethoxyquin) at the time of production.
- (d) Shipment of the material in bulk must take place within twelve months of the date of production.
- (e) The temperature of the material to be loaded must not, at the time of loading exceed 35 °C (95 °F), or 5 °F above ambient temperature, whichever is greater.
- (f) The material must contain at least 100 ppm antioxidant (ethoxyquin) at the time of shipment.
- (g) Each shipment of the material in bulk must be accompanied by a statement in which the shipper certifies:
- (1) The moisture content of the material;
 - (2) The fat content of the material;
- (3) The concentration of antioxidant (ethoxyquin) in the material in ppm at the time the material is loaded on a vessel in bulk;
- (4) Date and place of production of the material; and
- (5) The physical state of the material (ground, pelletized, or mixture).
- (h) Temperature readings must be taken three times a day and recorded. If the temperature of the cargo exceeds 130 °F and continues to increase, ventilation to the hold must be restricted.

§148.04-13 Ferrous metal borings, shavings, turnings, or cuttings (excluding stainless steel).

(a) This section applies to the stowage and transportation in bulk of hazardous materials described as ferrous metal borings, shavings, turnings, or cuttings on board vessels (excluding stainless steel). However, unmanned barges on which the article is stowed for or transported on a voyage entirely on the navigable waters of the United States are exempt from the requirements of this section. Ferrous metal borings, shavings, turnings, or cuttings (excluding stainless steel) must not be